

# TRAITE DE COOPERATION EN MATIERE DE BREVETS

## PCT

### RAPPORT D'EXAMEN PRELIMINAIRE INTERNATIONAL

(article 36 et règle 70 du PCT)

REC'D 30 JUL 2004



WIPO PCT

Référence du dossier du déposant ou du mandataire	<b>POUR SUITE A DONNER</b> voir la notification de transmission du rapport d'examen préliminaire international (formulaire PCT/PEA/416)	
Demande internationale No. PCT/FR 03/03227	Date du dépôt international (jour/mois/année) 29.10.2003	Date de priorité (jour/mois/année) 29.10.2002
Classification internationale des brevets (CIB) ou à la fois classification nationale et CIB B01D15/02		
Déposant NOVASEP et al.		

1. Le présent rapport d'examen préliminaire international, établi par l'administration chargée de l'examen préliminaire international, est transmis au déposant conformément à l'article 36.
2. Ce RAPPORT comprend 4 feuilles, y compris la présente feuille de couverture.  
☐ Il est accompagné d'ANNEXES, c'est-à-dire de feuilles de la description, des revendications ou des dessins qui ont été modifiées et qui servent de base au présent rapport ou de feuilles contenant des rectifications faites auprès de l'administration chargée de l'examen préliminaire international (voir la règle 70.16 et l'instruction 607 des Instructions administratives du PCT).  
Ces annexes comprennent feuilles.

3. Le présent rapport contient des indications et les pages correspondantes relatives aux points suivants :

- I ☒ Base de l'opinion
- II ☐ Priorité
- III ☐ Absence de formulation d'opinion quant à la nouveauté, l'activité inventive et la possibilité d'application industrielle
- IV ☐ Absence d'unité de l'invention
- V ☒ Déclaration motivée selon la règle 66.2(a)(ii) quant à la nouveauté, l'activité inventive et la possibilité d'application industrielle; citations et explications à l'appui de cette déclaration
- VI ☐ Certains documents cités
- VII ☐ Irrégularités dans la demande internationale
- VIII ☐ Observations relatives à la demande internationale

Date de présentation de la demande d'examen préliminaire internationale 21.05.2004	Date d'achèvement du présent rapport 29.07.2004
Nom et adresse postale de l'administration chargée de l'examen préliminaire international  Office européen des brevets D-80298 Munich Tél. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Fonctionnaire autorisé Ladenburger, C N° de téléphone +49 89 2399-8276 

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**RAPPORT D'EXAMEN  
PRÉLIMINAIRE INTERNATIONAL**

Demande internationale n°

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5. ☐ Le présent rapport a été formulé abstraction faite (de certaines) des modifications, qui ont été considérées comme allant au-delà de l'exposé de l'invention tel qu'il a été déposé, comme il est indiqué ci-après (règle 70.2(c)) :

*(Toute feuille de remplacement comportant des modifications de cette nature doit être indiquée au point 1 et annexée au présent rapport.)*

6. Observations complémentaires, le cas échéant :

**V. Déclaration motivée selon l'article 35(2) quant à la nouveauté, l'activité inventive et la possibilité d'application industrielle; citations et explications à l'appui de cette déclaration**

- |  |      |                |      |
|--|------|----------------|------|
| 1. Déclaration                         |      |                |      |
| Nouveauté                              | Oui: | Revendications | 1-16 |
|  | Non: | Revendications |      |
| Activité inventive                     | Oui: | Revendications | 1-16 |
|  | Non: | Revendications |      |
| Possibilité d'application industrielle | Oui: | Revendications | 1-16 |
|  | Non: | Revendications |      |

2. Citations et explications

**voir feuille séparée**

**V.2 Déclaration motivée: citations et explications**

Les documents cités dans le RRI ne divulguent pas et ne suggèrent d'aucune façon le procédé de séparation par chromatographie multicolonne et le dispositif de chromatographie pour sa mise en oeuvre revendiqués dans les revendications 1 et 10. Dans la présente invention on soutire au moins une partie du flux, on la concentre et on la réinjecte au moins partiellement au même endroit (points de soutirage et de réinjection l'un à côté de l'autre entre les deux mêmes zones), alors que dans l'art antérieur les parties soutirées puis réinjectées sont réinjectées à un endroit différent (par ex. soutirage entre les zones II et III et réinjection entre les zones I et II)(comparer les Figures 1 (16,15) de US-A-5 434 298 et 4A (SB,IRB) & 4B (SA,IRA) de US-A-5 422 007 avec la Figure 2 de la présente demande).

L'objet de la présente demande peut donc être reconnu comme nouveau et inventif par rapport à cet état de la technique.

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Translation

PATENT COOPERATION TREATY

PCT/FR2003/003227



# PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 19752PC NOVA	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/FR2003/003227	International filing date ( <i>day/month/year</i> ) 29 octobre 2003 (29.10.2003)	Priority date ( <i>day/month/year</i> ) 29 octobre 2002 (29.10.2002)
International Patent Classification (IPC) or national classification and IPC B01D 15/02		
Applicant NOVASEP		

<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>4</u> sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of _____ sheets.</p>
<p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the report</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>

Date of submission of the demand 21 mai 2004 (21.05.2004)	Date of completion of this report 29 July 2004 (29.07.2004)
Name and mailing address of the IPEA/EP  Facsimile No.	Authorized officer  Telephone No.

Form PCT/IPEA/409 (cover sheet) (July 1998)

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## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/FR2003/003227

## I. Basis of the report

## 1. With regard to the elements of the international application:\*

- ☐ the international application as originally filed
- ☒ the description:  
pages \_\_\_\_\_ 1-11 \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☒ the claims:  
pages \_\_\_\_\_ 1-16 \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, as amended (together with any statement under Article 19  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☒ the drawings:  
pages \_\_\_\_\_ 1/2, 2/2 \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the sequence listing part of the description:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

## 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

## 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/fig \_\_\_\_\_

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.  
PCT/FR 03/03227

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

### 1. Statement

Novelty (N)	Claims	1-16	YES
	Claims		NO
Inventive step (IS)	Claims	1-16	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-16	YES
	Claims		NO

### 2. Citations and explanations

None of the documents cited in the international search report discloses or suggests in any way the multi-column chromatography separation method and the chromatography device for implementing same, as claimed in claims 1 and 10. According to the present invention, at least a portion of the flow is extracted, concentrated and at least partially re-injected in the same location (the extraction and re-injection points are located next to each other between the same two areas), whereas in the prior art, the extracted and re-injected portions are re-injected in a different location (for example, extraction between areas II and III, and re-injection between areas I and II) (compare figures 1 (16, 15) of document US-A-5 434 298 and 4A (SB, IRB) & 4B (SA, IRA) of document US-A-5 422 007, with figure 2 of the present application).

Therefore, the novelty and inventive step of the subject matter of the present application is recognised in relation to said prior art.

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